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Iowa First:

Using cost-benefit analysis to support accountability and budgeting

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- **Iowa is one of 11 states partnering with Pew to employ a cutting-edge cost-benefit analysis model that analyzes key state policy areas**
- **Enables states to analyze a wide range of policy choices and identify those that can maximize outcomes AND reduce costs**
- **Model can assess individual programs and portfolios of related policies**

Approach in a nutshell

- 1. Aggregate best national research to identify evidence-based programs that are effective**
- 2. Estimate these programs' impact if implemented in Iowa, based on the state's population characteristics**
- 3. Use Iowa fiscal data to estimate total costs and benefits for each program**

Result - Predicted state return on investment for each program

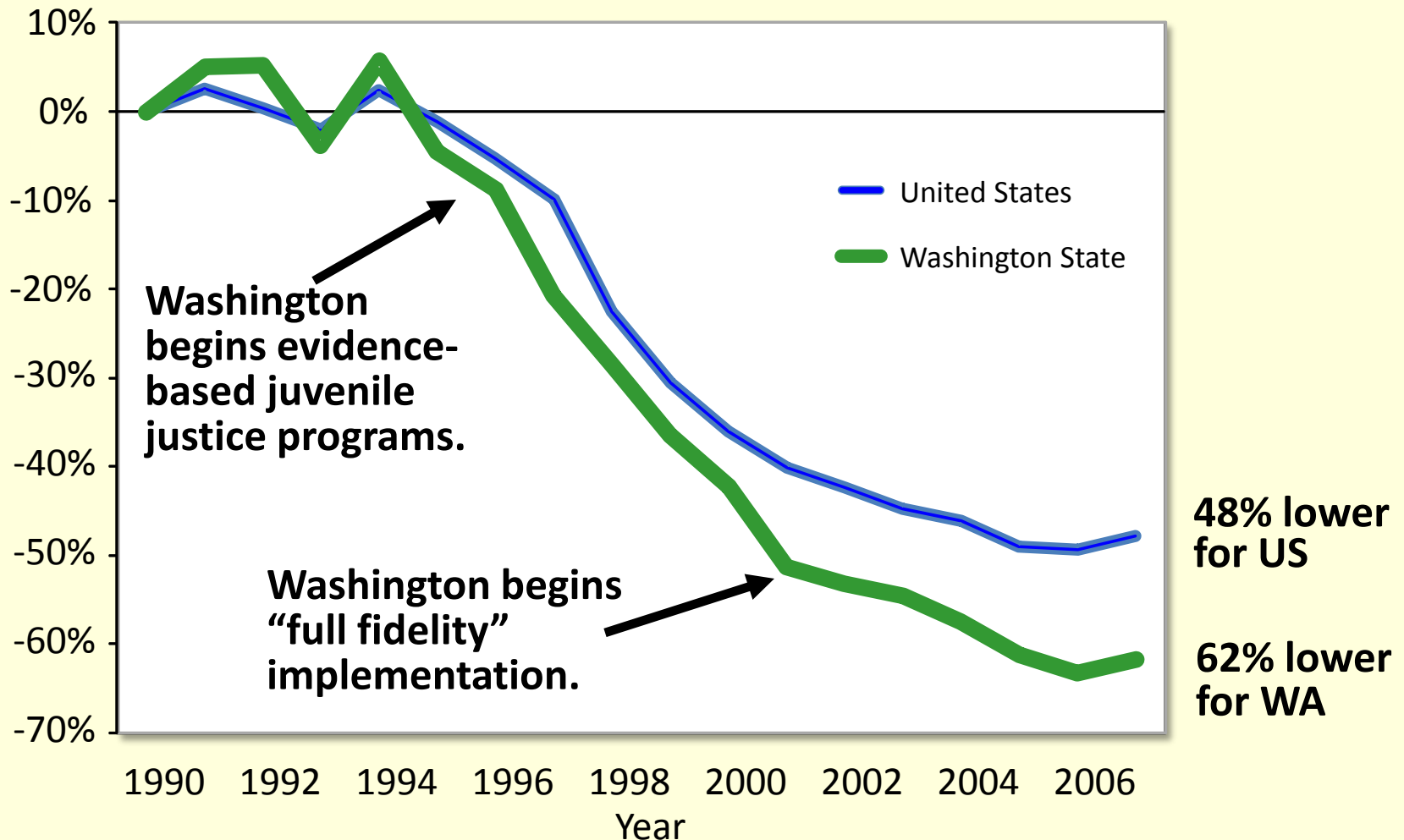
Model successfully used in Washington State



- **Developed by Washington State Institute for Public Policy**
- **Washington has used model for many years to help achieve better outcomes at lower costs in many policy areas**
 - **Example - criminal justice: Washington State has avoided \$1.3 billion per biennium AND achieved a lower crime rate**

Keeping Track of Results: Juvenile Arrest Rates

Change since 1990 in the United States and in Washington (WA) State



Example: Functional Family Therapy (Washington State - 2010 Dollars)

<u>Benefits Per Family</u>		<u>Main Source of Benefits</u>
Reduced crime	\$31,745	Lower state & victim costs
Increased high school graduation	\$5,686	Increased earnings
Reduced health care costs	\$307	Lower public costs
Total Benefits Per Family	\$37,739	
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Cost Per Family	\$3,190	
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Net Present Value	\$34,549	
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Benefits Per Dollar of Cost	\$11.86	

Addendum (distribution of benefits)

\$3,599	= Benefits to participant
\$8,336	= Benefits to taxpayers
\$21,636	= Benefits to others (crime victims)
\$4,167	= Other benefits

Example: Nurse Family Partnership
(Washington State data and 2010 dollars)

Benefits Per Family

Main Source of Benefits

Reduced child abuse and neglect	\$1,031	Lower state / victim costs
Educational gains	\$19,590	Increased earnings
Reduced crime	\$5,580	Lower state / victim costs
Health care & mental health	\$5,246	Increased earnings
Public Assistance	\$637	Reduced payments
Increased K-12 costs	-\$1,820	Special ed & retention
Reduced substance abuse	\$61	Earnings, health care \$

Total Benefits Per Family

\$30,325

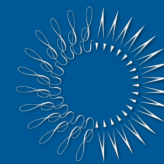
Cost Per Family

\$9,421

Benefits Per Dollar of Cost

\$3.23

Can use results to rank programs in a “Consumer Reports” list



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Exhibit 4

Reducing Crime With Evidence-Based Options: What Works, and Benefits & Costs

Washington State Institute for Public Policy Estimates as of October, 2006	Effect on Crime Outcomes (Percent change in crime outcomes, & the number of evidence-based studies on which the estimate is based (in parentheses)) (1)	Benefits and Costs (Per Participant, Net Present Value, 2006 Dollars)			
		Benefits to Crime Victims (of the reduction in crime) (2)	Benefits to Taxpayers (of the reduction in crime) (3)	Costs (marginal program cost, compared to the cost of alternative) (4)	Benefits (total) Minus Costs (per participant) (5)
		Notes: "n/e" means not estimated at this time. Prevention program costs are partial program costs, pro-rated to match crime outcomes.			
		Programs for People in the Adult Offender System			
Vocational education in prison	-9.0% (4)	\$8,114	\$6,806	\$1,182	\$13,738
Intensive supervision: treatment-oriented programs	-16.7% (11)	\$9,318	\$9,369	\$7,124	\$11,563
General education in prison (basic education or post-secondary)	-7.0% (17)	\$6,325	\$5,308	\$962	\$10,669
Cognitive-behavioral therapy in prison or community	-6.3% (25)	\$5,658	\$4,746	\$105	\$10,299
Drug treatment in community	-9.3% (6)	\$5,133	\$5,495	\$574	\$10,054
Correctional industries in prison	-9.9% (4)	\$5,360	\$4,496	\$417	\$9,439
Drug treatment in prison (therapeutic communities or outpatient)	-5.7% (20)	\$5,133	\$4,306	\$1,604	\$7,535
Adult drug courts	-8.0% (57)	\$4,395	\$4,705	\$4,333	\$4,767
Employment and job training in the community	-4.3% (16)	\$2,373	\$2,386	\$400	\$4,359
Electronic monitoring to offset jail time	0% (9)	\$0	\$0	\$870	\$870
Sex offender treatment in prison with aftercare	-7.0% (6)	\$6,442	\$2,885	\$12,585	-\$3,258
Intensive supervision: surveillance-oriented programs	0% (23)	\$0	\$0	\$3,747	-\$3,747
Washington's Dangerously Mentally Ill Offender program	-20.0% (1)	\$18,020	\$15,116	n/e	n/e
Drug treatment in jail	-4.5% (9)	\$2,481	\$2,656	n/e	n/e
Adult boot camps	0% (22)	\$0	\$0	n/e	n/e
Domestic violence education/cognitive-behavioral treatment	0% (9)	\$0	\$0	n/e	n/e
Jail diversion for mentally ill offenders	0% (11)	\$0	\$0	n/e	n/e
Life Skills education programs for adults	0% (4)	\$0	\$0	n/e	n/e
Programs for Youth in the Juvenile Offender System					
Multidimensional Treatment Foster Care (v. regular group care)	-22.0% (3)	\$51,828	\$32,915	\$6,945	\$77,798
Adolescent Diversion Project (for lower risk offenders)	-19.9% (6)	\$24,328	\$18,208	\$1,913	\$40,623
Family Integrated Transitions	-13.0% (1)	\$30,708	\$19,502	\$9,665	\$40,545
Functional Family Therapy on probation	-15.9% (7)	\$19,529	\$14,617	\$2,325	\$31,821
Multisystemic Therapy	-10.5% (4)	\$12,855	\$9,622	\$4,264	\$18,213
Aggression Replacement Training	-7.3% (4)	\$8,897	\$6,659	\$897	\$14,660
Teen courts	-11.1% (5)	\$5,907	\$4,238	\$936	\$9,208
Juvenile boot camp to offset institution time	0% (14)	\$0	\$0	\$8,077	\$8,077
Sex offender cognitive-behavioral treatment	-10.2% (5)	\$32,515	\$8,377	\$33,064	\$7,929
Restorative justice for low-risk offenders	-8.7% (21)	\$4,628	\$3,320	\$880	\$7,067
Interagency coordination programs	-2.5% (15)	\$3,084	\$2,308	\$205	\$5,186
Juvenile drug courts	-3.5% (15)	\$4,232	\$3,167	\$2,777	\$4,622
Regular surveillance-oriented parole (v. no parole supervision)	0% (2)	\$0	\$0	\$1,201	-\$1,201
Juvenile intensive probation supervision programs	0% (3)	\$0	\$0	\$1,598	-\$1,598
Juvenile wilderness challenge	0% (9)	\$0	\$0	\$3,085	-\$3,085
Juvenile intensive parole supervision	0% (10)	\$0	\$0	\$6,460	-\$6,460
Scared Straight	+6.8% (10)	-\$8,355	-\$6,253	\$58	-\$14,667
Counseling/psychotherapy for juvenile offenders	-18.9% (6)	\$23,126	\$17,309	n/e	n/e
Juvenile education programs	-17.5% (3)	\$41,181	\$26,153	n/e	n/e
Other family-based therapy programs	-12.2% (12)	\$15,006	\$11,231	n/e	n/e
Team Child	-10.9% (2)	\$5,759	\$4,131	n/e	n/e
Juvenile behavior modification	-8.2% (4)	\$19,271	\$12,238	n/e	n/e
Life skills education programs for juvenile offenders	-2.7% (3)	\$6,441	\$4,091	n/e	n/e
Diversion progs. with services (v. regular juvenile court)	-2.7% (20)	\$1,441	\$1,034	n/e	n/e
Juvenile cognitive-behavioral treatment	-2.5% (8)	\$3,123	\$2,337	n/e	n/e
Court supervision vs. simple release without services	0% (8)	\$0	\$0	n/e	n/e
Diversion programs with services (v. simple release)	0% (7)	\$0	\$0	n/e	n/e
Juvenile intensive probation (as alternative to incarceration)	0% (5)	\$0	\$0	n/e	n/e
Guided Group Interaction	0% (4)	\$0	\$0	n/e	n/e
Prevention Programs (crime reduction effects only)					
Nurse Family Partnership-Mothers	-56.2% (1)	\$11,531	\$8,161	\$5,409	\$14,283
Nurse Family Partnership-Children	-16.4% (1)	\$8,632	\$4,922	\$733	\$12,822
Pre-K education for low income 3 & 4 year olds	-14.2% (8)	\$8,145	\$4,644	\$593	\$12,196
Seattle Social Development Project	-18.6% (1)	\$1,605	\$4,341	n/e	n/e
High school graduation	-10.4% (1)	\$1,738	\$2,851	n/e	n/e
Guiding Good Choices	-9.1% (1)	\$570	\$2,092	n/e	n/e
Parent-Child Interaction Therapy	-3.7% (1)	\$268	\$784	n/e	n/e
Program types in need of additional research & development before we can conclude they do or do not reduce crime outcomes:					
Programs needing more research for people in the adult offender system					
Case management in the community for drug offenders	0% (13)			Findings are mixed for this broad grouping of programs.	
OOSA (Faith-based supervision of sex offenders)	-22.3% (1)			Too few evaluations to date.	
Day fines (compared to standard probation)	0% (1)			Too few evaluations to date.	
Domestic violence courts	0% (2)			Too few evaluations to date.	
Faith-based programs	0% (5)			Too few evaluations to date.	
Intensive supervision of sex offenders in the community	0% (4)			Findings are mixed for this broad grouping of programs.	
Medical treatment of sex offenders	-21.4% (1)			Too few evaluations to date.	
Mixed treatment of sex offenders in the community	0% (2)			Too few evaluations to date.	
Regular parole supervision vs. no parole supervision	0% (1)			Too few evaluations to date.	
Restorative justice programs for lower risk adult offenders	0% (6)			Findings are mixed for this broad grouping of programs.	
Therapeutic community programs for mentally ill offenders	-20.8% (2)			Too few evaluations to date.	
Work release programs (from prison)	-4.3% (4)			Too few recent evaluations.	
Programs needing more research for youth in the juvenile offender system					
Dialectical Behavior Therapy	0% (1)			Too few evaluations to date.	
Increased drug testing (on parole) vs. minimal drug testing	0% (1)			Too few evaluations to date.	
Juvenile curfews	0% (1)			Too few evaluations to date.	
Juvenile day reporting	0% (2)			Too few evaluations to date.	
Juvenile jobs programs	0% (3)			Too few recent evaluations.	
Juvenile therapeutic communities	0% (1)			Too few evaluations to date.	
Mentoring in juvenile justice	0% (1)			Too few evaluations to date.	

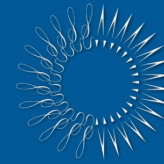
What Works Best?

What Doesn't?

What Can Give Taxpayers a Good Return on Their Money?

Given the Current Level of Rigorous Research, What Don't We Know?

Example Criminal Justice Program Ranking



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Based on Washington State data

	Change In Crime	Benefits less costs, per-person, life cycle
<u>Adult Offenders</u>		
Supervision with treatment	-18%	\$15,079
Prison Education	-8%	\$13,555
Cognitive-Behavioral Treatment	-7%	\$12,037
Drug Treatment in Prison	-6%	\$9,588
Adult Drug Courts	-9%	\$6,264
Supervision only	-2%	-\$2,174
<u>Juvenile Offenders</u>		
Functional Family Therapy	-18%	\$32,021
Multi-Systemic Therapy	-13%	\$18,120
Aggression Replacement	-9%	\$15,257
Family Transitions	-10%	\$29,721
Therapeutic Foster Care	-18%	\$64,486

Policy areas in model

- **Criminal Justice**
- **K-12 Education**
- **Child Welfare**
- **Substance Abuse**
- **Mental Health**
- **Public Assistance**
- **Housing**
- **Teen Birth Prevention**
- **Public Health**

Pew's Results First initiative

- **Provides model to state**
- **Trains staff in the approach**
- **Provides technical assistance in getting the model up and running**
- **Helps staff interpret results for policy makers**
- **Compiles and shares lessons learned with other participating states**
- **Periodically expands and updates model**

For more information



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